

CLAIMS

1. A treatment system for processing water, comprising:

a first filter having an inlet and an outlet, the inlet of the first filter being configured to fluidly communicate with a source of the water;

an osmotic membrane contained within a first housing having an inlet and an outlet, the inlet of the first housing being in fluid communication with the outlet of the first filter;

a mineral supplement device coupled to the outlet of the housing containing the osmotic membrane;

an electrolytic cell contained within a second housing having an inlet and an outlet, the inlet of the second housing being in fluid communication with the outlet of the mineral supplement device;

a tap having an inlet, an outlet and an actuator, the inlet of the tap in fluid communication with the outlet of the second housing, the actuator of the tap being configured to open a valve to dispense water via the tap; and

an electronic control circuit coupled to activate the electrolytic cell.

2. The system of claim 1, further comprising a carbon filter having an inlet and an outlet, the inlet of the carbon filter being in fluid communication with the outlet of the first housing and positioned prior to the second housing.

3. The system of claim 2, further comprising a tank between the first housing and the carbon filter, the tap such that the water is stored in the system after a reverse osmotic process but prior to passing through the carbon filter.

4. The system of claim 1, further comprising a tank between the osmotic membrane and the tap such that the water is stored in the system after a reverse osmotic process, and wherein the control circuit is configured to stop a flow of water when the water level in the tank is below a selected level.

5. The system of claim 2, further comprising a check valve at the outlet of the tank to prevent water from exiting the tank when it is below a selected level.

6. The system of claim 1, further comprising:  
a tank between the osmotic membrane and the tap such that the water is stored in the system after a reverse osmotic process; and  
a check valve that is configured to stop a flow of water following a first duration after the tap is open, the first duration corresponding to the amount of time it takes for the water in the tank to be reduced from completely full to a selected level above empty, the control circuit further configured to stop the flow of water from the tank.

7. The system of claim 6, wherein the check valve is a pressure sensitive valve.

8. The system of claim 6, wherein the check valve is a float valve within the tank.

9. The system of claim 1, wherein each of the elements are sufficiently small to be collectively placed beneath a residential sink, and wherein the source of water is a residential utility line

10. The system of claim 3, wherein the second housing is elongated having a first end and a second end, the electrolytic cell being positioned horizontally on top of the tank.

11. The system of claim 1, including:  
a filter prior to the osmotic filter; and  
a pump prior to the osmotic filter that provides increased pressure in the water line.

12. A method for processing water, comprising:

drawing water from a source of water and passing the water drawn through a first filter for removing sediment and other pollutants;

passing the water through a reverse osmosis filter;

passing the water through a mineral supplement device after passing the water through the reverse osmosis filter, the mineral supplement device for adding minerals to the water that are beneficial to human health and also to increase the conductivity of the water;

passing the water recently treated through an electrolytic cell contained within a second housing having an inlet and an outlet, the inlet of the second housing being in fluid communication with the outlet of the first housing, in order to add oxygen to the water; and

dispensing the treated water when a user wishes to drink the water.

13. The method of claim 12, further including:

passing the water that has been treated in the reverse osmosis filter through a second filter prior to entering the mineral supplement device.

14. The method of claim 12, further including:

activating the electrolytic cell each time that water is being dispensed.

15. The method of claim 12, further comprising:

storing the water in a tank after it exits the reverse osmosis filter and prior to entering the electrolytic cell.